Dear Colleagues,

The scientific committee is delighted to announce to you their newest edition concerning Skin Topics. The 12th International Conference on **Skin Ageing and Challenges** will be held on November 10-12, 2021, as an Interactive Online meeting, with sessions dedicated to Live Discussion with speakers and attendees. Skin Challenges 2021 is organized under the patronage of the International Society of Microbiota (ISM).

Kindly note that all communications and talks will be recorded and will be added on our platform.

Regardless of the fact that the conference will be partly held online, we promise to keep you entertained with our educational sessions delivered by the best speakers.

During Skin Challenges 2021, the Scientific Committee will allocate significant time to discuss the latest advances related to skin homeostasis and ageing. Our objective is to provide answers and to give a future vision and trends on: how can the current researches delay the side effects of ageing and skin ageing?

As in previous years, a strong focus will be again to foster the exchange between academia, basic research and industry, and applied research. We will also provide more time and space to present the recent innovations, biotechnology products and devices.

During both days, many oral and poster communications will be presented and will cover many hot topics. A workshop dedicated to Skin Microbiota will be organized on November 10 2021. Among the sessions that will be discussed:

- **Skin Ageing, Regeneration & Wound Healing – State of the Art & Perspectives**
- **Skin Microbiota – Recent Scientific Advances**
- **Lifestyle, Diet and Skin Ageing: The Inside Beauty**
- **Skin Challenges 2021 Innovations**

As always, we are very much looking forward to meeting you.

Prof. Jean Krutmann,
President of Skin Ageing & Challenges 2021,
IUF – Leibniz Research Institute for Environmental Medicine,
Leibniz, Germany
How to Evaluate Skin Microbiota 2021 Workshop?

2h00 pm – 5h30 pm Paris Time

- General introduction to the skin microbiota
- Involvement of the microbiota in skin pathologies
- How to study microbiota and skin microbiota?
- The manipulation of microbial communities
- How to prepare and launch your range of cosmetic products?

Florence Abdallah,
University of Paris Sud – INSERM 1184, France

For full agenda, registration, Workshop Report, and information, please follow this link
### Skin Ageing & Challenges 2021 Speakers

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<td>Mayo Clinic Robert and Arlene Kogod Center on Aging, USA</td>
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<td>Laurent Marrot</td>
<td><strong>Pollution and Skin: Advances and Perspectives</strong></td>
<td>Hôpital Saint Louis, Paris, France</td>
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<td>Charareh Pourzand</td>
<td><strong>Ironing Out Skin Photageing with Multi Functional Bio-Inspired Molecules</strong></td>
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<td>Jean-François Doré</td>
<td><strong>UV Exposure, a Major Skin Ageing Factor</strong></td>
<td>Emeritus Research Director at INSERM, France</td>
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<td>Shigefumi Okamoto</td>
<td><strong>How to Collect Skin Bacterial Flora on Fragile Skin: Practical Aspects of Medical Film Dressings and Strategies</strong></td>
<td>Kanazawa University, Japan</td>
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<td>WeiQi Zhang</td>
<td><strong>A Single-Cell Transcriptomic Atlas of Human Skin Ageing</strong></td>
<td>Chinese Academy of Sciences, China</td>
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<td>Paul Matte</td>
<td><strong>Ethnic Skin Ageing</strong></td>
<td>Victor Mills Research Fellow at Procter &amp; Gamble, USA</td>
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<td>Uwe Wollina</td>
<td><strong>Challenges of Covid-19 Pandemic for Dermatology</strong></td>
<td>Academic Teaching Hospital, Germany</td>
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<td>Duccio Cavallari</td>
<td><strong>Early Melanoma Invasivity Correlates with Gut Fungal and Bacterial Profiles: the Gut Microbiome Skin Connection</strong></td>
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<td>Luba Prado Cortes</td>
<td><strong>Cutaneous Microbiome, Seborrheic Dermatitis and Skin Ageing</strong></td>
<td>Erasmus University, Rotterdam, the Netherlands</td>
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<td>Ali Shajmonadi</td>
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<td>MedSkin Solutions Dr. Sweeney AG, Germany</td>
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<td>Xi Huang</td>
<td><strong>Effects of Iron-Rich Diets, Cigarette Smoking, Color Cosmetics, and Genetic Disease such as Hemochromatosis and Hemophilia Impact on Skin Aging</strong></td>
<td>F-Oh Skincare, USA</td>
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<td>Fatin Nur Majdzina Nordin</td>
<td><strong>Halal Cosmetic: Concept and Challenges</strong></td>
<td>University Malaya Halal Research Centre, Malaysia</td>
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<td>Elodie Henriet</td>
<td><strong>MicroRNAs as Attractive Biological Targets for Cutaneous Remodeling</strong></td>
<td>CNRS, University of Orleans, France</td>
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<td>Maria Amâlia Cavinato Nascimento</td>
<td><strong>Targeting Cellular Senescence Based on Interorganelle Communication, Multilevel Protostasis, and Metabolic Control</strong></td>
<td>Leopold Franzens Universität Innsbruck, Austria</td>
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<td>George F. Murphy</td>
<td><strong>Skin Ageing: It's Structural Basis and Why It Matters</strong></td>
<td>Harvard Medical School, USA</td>
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<td>David Granville</td>
<td><strong>Granzymes in Epithelial Barrier Disruption and Disease</strong></td>
<td>University of British Columbia, Canada</td>
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<td>Leah Vardy</td>
<td><strong>Polyamines: Essential Regulators of Epidermal Function</strong></td>
<td>Skin Research Institute of Singapore, Singapore</td>
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<td>Margherita Malot</td>
<td><strong>Nanomaterials and Natural Compounds In Skin Regeneration and Rejuvenation</strong></td>
<td>Department of Biomedical Sciences University of Sassari, Italy</td>
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<td>Pia Jahan</td>
<td><strong>Skin Aging in Indians Living in Highly Polluted Areas</strong></td>
<td>IUF-Leibniz Research Institute for Environmental Medicine, Germany</td>
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www.skin-challenges.com
**Congress Programme Day 1:**
**November 11, 2021**

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<td>9:00 am</td>
<td>Welcome Note &amp; Introduction Remarks&lt;br&gt;Prof. Jean Krutmann, President of Skin Challenges 2021, Leibniz Research Institute for Environmental Medicine, Germany</td>
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<td>9:10 am</td>
<td>Session 1: Skin Ageing, Regeneration &amp; Wound Healing – State of the Art &amp; Perspectives&lt;br&gt;<strong>Skin Ageing: It’s Structural Basis and Why It Matters</strong>&lt;br&gt;George F. Murphy, Harvard Medical School, USA</td>
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<td><strong>A Single-Cell Transcriptomic Atlas of Human Skin Ageing</strong>&lt;br&gt;Weiqi Zhang, Chinese Academy of Sciences, China</td>
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<td>Coffee Break</td>
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<td>11:20 am</td>
<td><strong>MicroRNAs as Attractive Biological Targets for Cutaneous Remodeling</strong>&lt;br&gt;Elodie Henriet, Center for Molecular Biophysics, CNRS-UPR4301, France</td>
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<td><strong>Targeting Cellular Senescence Based on Interorganelle Communication, Multilevel Proteostasis, and Metabolic Control</strong>&lt;br&gt;Maria Amália Cavinato Nascimento, Leopold Franzens Universität Innsbruck, Austria</td>
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12:20 pm

**Study of Oxidative Stress Under the True Oxygenation of The Skin, Physioxia**

*Nedira Chettou-Hammas, Center for Molecular Biophysics, CNRS UPR 4301, France*

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12:30 pm

*Lunch Break*

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12:40 pm

**Challenges of COVID-19 pandemic for dermatology**

*Uwe Wollina, Municipal Hospital Dresden, Academic Teaching Hospital, Dresden, Germany*

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1:00 pm

**Granzymes in Epithelial Barrier Disruption and Disease**

*David Granville, University of British Columbia, Canada*

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1:40 pm

**Polyamines: Essential Regulators of Epidermal Function**

*Leah Vardy, Skin Research Institute of Singapore, Singapore*

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2:10 pm

**Senolytics: The Path to Translation**

*James Kirkland, Mayo Clinic Robert and Arlene Kogod Center on Aging, USA*

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**Session 2 : Skin Microbiota – Recent Scientific Advances**

3:10 pm

**New Results for the Skin Microbiome Study**

*Shigefumi Okamoto, Institute for Frontier Science Initiative, Kanazawa University, Japan*

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3:40 pm

**Early Melanoma Invasivity Correlates with Gut Fungal and Bacterial Profiles: The Gut Microbiome Skin Connection**

*Duccio Cavalieri, University of Florence, Italy*

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4:10 pm

**Cutaneous Microbiome, Seborrheic Dermatitis and Skin Aging**

*Luba Pardo Cortes, Erasmus University in Rotterdam, the Netherlands*

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4:40 pm

*Coffee Break*
Poster Presentations
Available on the platform at your convenience

Lipophilic Yeasts as Etiological Factors of Pityriasis Versicolor and Components of Typical Skin Mycobiome – Case Study
*Mariusz Dylag, University of Wroclaw, Poland*

Diagnostic In Vivo Covid 19 Virus Antibody Sensing by Using Synthetic Mimic Skin Tattoo Virtual Circuit
*Sihyun Jun, Biosensor Research Institute Seoul Korea, Korea*

In Vivo Bio Assay of Artificial Skin Sensor for SARS Virus Detection
*Dong Ho Kim, Korea Institute of Radiological and Medical Sciences, Korea*

Intracellular Delivery of Nuclear Localization Signal Alleviates Atopic Dermatitis by Regulating the Pathological Immune Environment
*Jaehyeon Kim, Cellivery Therapeutics, Inc., South Korea*

Keratin-Butyrate Scaffolds Accelerate Skin Wound Healing in Diabetic Rats
*Piotr Konopelski, Medical University of Warsaw, Poland*

Development of Portable Raman Spectroscopy as a Clinic Tool for Assessing Photodamage in Skin
*Ira Mautner, University of Auckland, New Zealand*

Skin Cellular Youth Reprogramming with Terminalia Sericea Extract for a Wide Clinical Anti-Ageing Effect
*Marie Meunier, Givaudan Active Beauty – France*

The Effects of Genistein on Skin Ageing and Disorders in Women After Breast Cancer Treatment
*Magda Pawlicka, Medical University of Lublin, Poland*

UVA Photoprotective Effect of Adenine Derivate Kinetin and its Derivatives on Normal Human Dermal Fibroblasts
*Denisa Skarupova, Palacký University Olomouc, Czech Republic*

5:20 pm – 7:00 pm Paris time
Interactive Live Discussion & Networking of Day 1
Dedicated to Questions & Networking with All Speakers

7:00 pm – End of Day 1
Congress Programme Day 2: November 12, 2021

Session 3: Lifestyle, Diet and Skin Aging: The Inside Beauty

9:00 am  Recorded  Ironing Out Skin Photoageing with Multifunctional Bio-Inspired Molecules
Charareh Pourzand, University of Bath, United Kingdom

9:30 am  Live  UV Exposure – Major Skin Ageing Factor
Jean-François Doré, Emeritus Research Director at INSERM, France

10:00 am  Recorded  Effects of Iron-Rich Diets, Cigarette Smoking, Color Cosmetics, and Genetic Disease Such as Hemochromatosis and Hemophilia Impact on Skin Aging
Xi Huang, i-On Skincare, USA

10:30 am  Live  Pollution and Skin: Advances and Perspectives
Laurent Marrot, L’OREAL, France

11:00 am  Live  Skin Aging in Indians Living in Highly Polluted Areas
Pia Jahan, IUF-Leibniz Research Institute for Environmental Medicine, Germany

11:30 am  Coffee Break

Session 4: Skin Challenges 2021 Innovations

11:40 am  Recorded  Updated Treatment for Acne: Targeted Therapy Based on Pathogenesis
Ichiro Kurokawa, Meiwa Hospital, Japan

12:10 pm  Live  Advancements of Electronic Bandage for Accelerated Skin Wound Healing
Xudong Wang, University of Wisconsin-Madison, USA
12:40 pm  
**Skin Anti-Aging Effects of Resveratrol: Recent Studies and Perspective**  
*Ali Shahmoradi, MedSkin Solutions Dr. Suwelack AG, Germany*

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**Halal Cosmetic: Concept and Challenges**  
*Fatin Nur Majdina Nordin, University Malaya Halal Research Centre, Malaysia*

1:40 pm  
**Nanomaterials and Natural Compounds in Skin Regeneration and Rejuvenation**  
*Margherita Maioli, Department of Biomedical Sciences, University of Sassari, Italy*

2:10 pm  
**Coffee Break**

2:20 pm – 4:20 pm  
**Short Oral Presentations**

Reduction of the Skin Biological Age and Improvement in Skin Health Markers by a Senotherapeutic Peptide  
*Juliana Lott, Catholic University of Brasilia, Brazil*

Exploring Hydroalcoholic Kiwiberry Leaves Extract as a New and Sustainable Cosmetic Ingredient  
*Ana Margarida Silva, Polytechnic of Porto, Portugal*

Daylight Defense with Innovative Bioactive Sphingolipid  
*Jennifer Schild, Evonik Operations GmbH, Germany*

Hybrid Layer of Chitosan-TiO₂-Hyaluronic Acid as a Potential Wound Dressing/Skin Substitute  
*Agnieszka Ewa Wiacek, Maria Curie-Skłodowska University, Poland*

Chestnut Shells Eco-Friendly Extracts as Promising Anti-Aging Ingredients for Greener Cosmetic Formulations  
*Diana Pinto, Polytechnic of Porto, Portugal*

Keratin-Biphalin Scaffold Accelerate Skin Wound Healing in Diabetic Mice  
*Marek Konop, Medical University of Warsaw, Poland*

T Cells with Dysfunctional Mitochondria Induce Premature Skin Aging  
*Elisa Carrasco, Universidad Autónoma de Madrid, Spain*

Mitochondria-Targeted Antioxidants Based on Hydroxycinnamic and Hydroxybenzoic Acids as Potential Candidates to Prevent Skin Ageing  
*José Feliciano Duarte, Mitotag, Portugal*

Cream for Skin Barrier Restoration  
*Eva Moreino, Riga Stradins University, Latvia*
Voltammetric Corona Virus Detection using Antigen Antibody Ionic Skin Sensor
Hyeon Jeong Park, Biosensor Research Institute Seoul Korea, Korea

Tattoo Skin Sensing for Biological In Vitro and In Vivo Assay
Katlynn Ryu, Joongbu University Department of Bio-Cosmetics, Korea

Cigarette Smoke and Sunlight: A Synergistic Effect on Keratinocytes
Alexe Grenier, Université Laval, Canada

4:30 pm – 6:00 pm Paris time

Interactive Live Discussion & Networking of Day 2

Dedicated to Questions & Networking with All Speakers

6:00 pm – End of Skin Ageing & Challenges 2021